

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

I claim:

1. A water well pump comprising:

a first member having an exterior elongated shell surrounding a tube member and an intake tube;

a one way standing valve positioned above said intake tube within said first member for receiving well water, said one- way standing valve having an elastic ball supported by a first support means and maintained within said one-way standing valve by a blocking means, wherein said blocking means comprises a damper ring to reduce water hammering when said water well pump is in operation;

a piston stop within said first member positioned above said one-way standing valve and within said tube member to stop a piston when said water well pump is in operation;

a second member having said piston surrounding a release tube and a joining tube, said piston positioned at the bottom of said second member and movable axially within said tube member, said piston having an upper end adjacent said release tube and a lower end in axial communication with said piston stop when said water well pump is in operation;

1  
2 a one way traveling valve positioned within said piston, said one way traveling valve  
3 having a ball supported by a second support means and maintained within said one-  
4 way traveling valve by an angular blocking means, wherein said angular blocking  
5 means comprises an angular ball stop designed to block said ball and roll it to the  
6 side of said one way traveling valve;

7  
8 a plug positioned within said joining tube to block water from exiting said joining  
9 tube;

10  
11 a plurality of release ports positioned on the exterior of said release tube to permit  
12 water to exit said release tube into water lines;

13  
14 and a first sealing means used to fit said tube member within said shell comprising  
15 slits cut in the exterior of said tube member which compress under hydraulic force.

16  
17  
18 2. The water well pump of Claim 1 wherein said one- way standing valve further  
19 comprises a twist notch positioned above said elastic ball to rotate said elastic ball  
20 to provide even wear.

1 3. The water well pump of Claim 1 wherein said one-way standing valve further  
2 comprises a collar positioned around said elastic ball to prevent water hammer.

3

4 4. The water well pump of Claim 1 wherein said angular ball stop has a 45 degree  
5 angle.

6

7 5. The water well pump of Claim 1 further comprising a main seat with an orifice  
8 positioned above said first support means.

9

10 6. The water well pump of Claim 1 wherein said second support means is  
11 comprised of a bushing surrounding a stool.

12

13 7. The water well pump of Claim 1 further comprising a gravel plug positioned  
14 within said intake tube.

15

16 8. The water well pump of Claim 1 wherein said blocking means further comprises  
17 a balcony seat positioned above said elastic ball, said balcony seat rotates said  
18 elastic ball to provide even wear.

19

20 9. The water well pump of Claim 1 further comprising a second sealing means used  
21 to fit said joining tube within said release tube comprising slits cut in the exterior of

1 said joining tube which compress under hydraulic force.

2  
3 10. The water well pump of Claim 1 wherein said shell, said tube member, said  
4 release tube, and said joining tube are constructed of Schedule 40 PVC piping.

5  
6 11. The water well pump of Claim 1 wherein said ball in said one way traveling  
7 valve is a glass marble.

8  
9 12. The water well pump of Claim 1 further comprising a third sealing means used  
10 to fit said release tube within said piston comprising slits cut in the exterior of said  
11 release tube which compress under hydraulic force.

12  
13 13. The water well pump of Claim 1 further comprising a fourth sealing means  
14 used to fit said bushing within said piston comprising slits cut in the exterior of said  
15 bushing which compress under hydraulic force.

16  
17 14. The water well pump of Claim 1 further comprising a fifth sealing means used  
18 to fit said stool within said bushing comprising slits cut in the exterior of said stool  
19 which compress under hydraulic force.

20  
21 15. The water well pump of Claim 1 further comprising a sixth sealing means used

1 to fit said balcony seat within said piston stop comprising slits cut in the exterior of  
2 said balcony seat which compress under hydraulic force.

3  
4 16. The water well pump of Claim 1 further comprising a seventh sealing means  
5 used to fit said damper ring within said balcony seat comprising slits cut in the  
6 exterior of said damper ring which compress under hydraulic force.

7  
8 17. The water well pump of Claim 1 further comprising an eighth sealing means  
9 used to fit said collar within said shell comprising slits cut in the exterior of said  
10 collar which compress under hydraulic force.

11  
12 18. A water well pump comprising:  
13 a first member having an exterior elongated shell surrounding a tube member and an  
14 intake tube;

15  
16 a one way standing valve positioned above said intake tube within said first member  
17 for receiving well water, said one- way standing valve having an elastic ball  
18 supported by a first support means and maintained within said one-way standing  
19 valve by a blocking means, wherein said blocking means comprises a damper ring to  
20 reduce water hammering when said water well pump is in operation and a balcony  
21 seat positioned above said elastic ball;

1  
2 a piston stop within said first member positioned above said one-way standing valve  
3 and within said tube member to stop a piston when said water well pump is in  
4 operation;

5  
6 a gravel plug positioned within said intake tube to block debris from entering said  
7 intake tube;

8  
9 a second member having said piston surrounding a release tube and a joining tube,  
10 said piston positioned at the bottom of said second member and movable axially  
11 within said tube member, said piston having an upper end adjacent said release  
12 tube and a lower end in axial communication with said piston stop when said water  
13 well pump is in operation;

14  
15 a one way traveling valve positioned within said piston, said one way traveling valve  
16 having a ball supported by a second support means, wherein said second support  
17 means is comprised of a bushing surrounding a stool, and said ball is maintained  
18 within said one-way traveling valve by an angular blocking means, wherein said  
19 angular blocking means comprises an angular ball stop designed to block said ball  
20 and roll it to the side of said one way traveling valve;

1 a plug positioned within said joining tube to block water from exiting said joining  
2 tube;

3  
4 a plurality of release ports positioned on the exterior of said release tube to permit  
5 water to exit said release tube into water lines;

6  
7 a first sealing means used to fit said tube member within said shell comprising slits  
8 cut in the exterior of said tube member which compress under hydraulic force; and

9  
10 a second sealing means used to fit said joining tube within said release tube  
11 comprising slits cut in the exterior of said joining tube which compress under  
12 hydraulic force.

13  
14 19. The water well pump of Claim 18 wherein said one-way standing valve further  
15 comprises a twist notch positioned above said elastic ball to rotate said elastic ball  
16 to provide even wear.

17  
18 20. The water well pump of Claim 18 wherein said one-way standing valve further  
19 comprises a collar positioned around said elastic ball to prevent water hammer.